

# Emergency Communicators Join Emergency Physicians and Others to Endorse Life-saving Technologies

By E. Jackson Allison, Jr., MD; and William Hinkle

"Telematics," "telemedicine," "E9-1-1"—these new technologies could save thousands of lives on the nation's highways, as well as in terrorist attacks and natural disasters, if implemented rapidly and applied properly.

In a recently released report, emergency communicators joined with emergency physicians and other emergency responders to call upon the federal government and the transportation industry to rapidly and appropriately implement these life-saving transportation communication technologies, known as intelligent transportation systems (ITS), many of which already exist.

Jim Goerke, then NENA Interim Executive Director, was a member of the panel of leading emergency medical service (EMS) professionals who authored the report, entitled "Recommendations for ITS Technology in Emergency Medical Services." The report was released at the American College of Emergency Physicians (ACEP) Scientific Congress in Seattle, Washington last autumn, at a press conference sponsored jointly by ACEP and the Intelligent Transportation Society of America (ITS America).

Expansion of ITS will enable us to respond more quickly to traffic crashes and save more lives, even as EMS resources grow more scarce. These technologies also are essential as we continue to respond to large-scale disasters, whether natural or man-made, by giving EMS responders and hospital personnel better information and faster access to patients.

Jeffrey W. Runge, M.D., administrator of the National Highway Traffic Safety Administration (NHTSA)—the federal government's chief automotive safety regulator—expressed his support for ITS safety solutions. Runge, himself an accomplished emergency physician, educator, and researcher, expressed the need for rapid implementation of transportation and medical communications technologies.

"Serious crashes happen every day, more than half of them in rural areas where the ability to rapidly contact 9-1-1 and the capability of responders to quickly reach the scene can mean the difference between life and death," Runge said. "New technologies, such as wireless E9-1-1, automatic collision notification and emergency vehicle route navigation are available that will make emergency access more reliable and help deliver faster and better emergency care. Implementing these critical tools requires the cooperation of public safety, medical and industry groups."

In addition to wireless E9-1-1, technologies endorsed by the report include:

- real-time, mobile, cross-agency voice and data networks that allow responders from different agencies and units to talk to one another more effectively;
- traffic signal priority and route guidance systems that help move emergency vehicles through ever-more-congested roadways;
- automatic collision notification systems that contact emergency centers immediately upon a vehicle's impact, providing

instant location information, and soon also may provide data related to crash severity and likely passenger injuries to both emergency responders and hospitals or trauma centers.

## Summary of Recommendations

The recommendations address priority action items for improvement of each link in the "chain of survival" sequence—the sequence of events that must occur to ensure the best possible outcome for victims of traumatic injury, cardiac arrest, and other time-critical, life-threatening situations. Highlights of the recommendations follow:

### 9-1-1

- ▶ Implement wireless location technology so 9-1-1 can locate callers who are using wireless phones.
- ▶ Make wireless telephone service available everywhere.

### Prompt EMS Dispatch and Arrival on Scene

- ▶ Provide resources to EMS community for new information and communication equipment, including automated location, real-time route guidance, and interoperable, real-time, voice and data networks.

### First Aid Before EMS Arrives

- ▶ Assure that the first operator answering an emergency call is trained in Emergency Medical Dispatch (EMD) procedures.

#### Medical Care On Scene and In Transit to Hospital

- Develop technical standards and procedures, and legal and ethical guidelines for telemedicine and advanced automatic crash notification (advanced ACN) systems as soon as possible, to promote rapid implementation of these life-saving technologies.

#### Trauma Center & Hospital Care

- Encourage trauma centers and hospitals to participate in regional emergency response partnerships to focus on imple-

mentation of cross-agency interoperable data-exchange and communications networks.

#### Public Health, Safety & Security

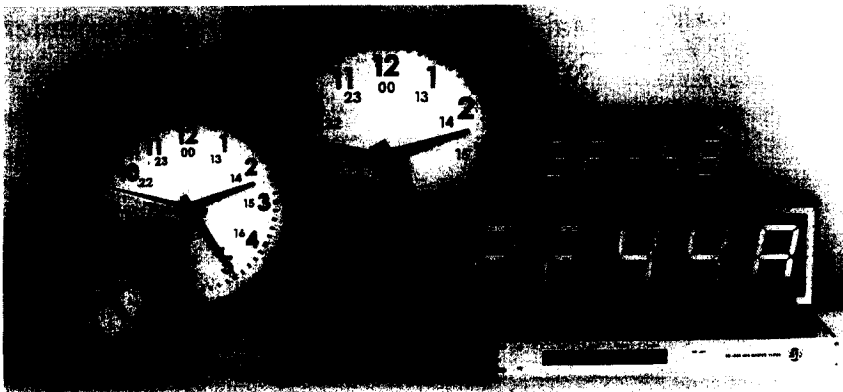
- Integrate ITS technology into existing emergency management systems and form ongoing operational partnerships and real-time communications networks connecting all emergency responders—including, at a minimum, EMS providers, transportation agencies, law enforcement agencies, and emergency management agencies. **NN**

*Dr. E. Jackson Allison, Jr. is Associate 1 & Professor of Emergency Medicine, College of Medicine, SUNY Upstate Medical University, and Chief-of-Staff, Veterans Affairs Medical Center, Syracuse, New York. Mr. Allison chaired ITS America Public Safety Advisory Group (PSAG) Medical Subcommittee, which drafted the Recommendations for ITS Technologies Emergency Medical Services. The PSAG includes representatives of the transportation, EMS, law enforcement, and rescue, and towing and recovery communities. ITS America is an official Federal Advisory Committee to the U.S. Department of Transportation (DOT).*

*William Hinkle is Director of Communication for Hamilton County, C and is a PSAG member who also served the Medical Subcommittee that wrote the Recommendations, and provides national leadership on wireless call location issues as chair of the DOT's Wireless Enhanced 9-1-1 Expert Working Group.*

For more information, contact William Baker, Public Safety Coordinator, ITS America (202) 484-4540. The full report may be downloaded from the U.S. Department of Transportation ITS Public Safety Program web page [www.its.dot.gov](http://www.its.dot.gov). Click on "Public Safety" the top of the screen.

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